UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,376	07/06/2004	Aki Tsuji	3883.025	8403

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/710,376	TSUJI ET AL.
	Examiner	Art Unit	
	Fred Ferris	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 July 2004</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-7</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-7</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☒ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date <u>5/9</u>.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-7 have been presented for examination based on applicant's disclosure filed 6 July 2004. Claims 1-7 remain pending in this application and stand rejected by the examiner.

Drawings

2.   New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because Figures 1-9 are of poor quality and difficult to read. For example, Figures 5-9 appear to be screen shots of a GUI associated with the claimed invention but the Figures are not legible. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Objections

3.   Claims 1-7 are objected to under 37 CFR § 1.75(i) because each element of each claim is not separated by a line indentation. For example, the text appearing as part of the limitation directed to "at least one client computer" appears to contain separate limitations regarding the "server computer" and the "client computer." Correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

4.   *Where applicant acts as his or her own lexicographer to specifically define a term*

of a claim contrary to its ordinary meaning, the written description must clearly redefine

the claim term and set forth the uncommon definition so as to put one reasonably skilled

in the art on notice that the applicant intended to so redefine that claim term. Process

Control Corp. v. HydReclaim Corp., 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed.

Cir. 1999). The term "real-number" in claims 1-7 appears to be used by the claim to

simply mean "part number" [para:0046], while the accepted meaning of "real-number" is

an integer including a fractional part (Microsoft Computer Dictionary, 1997). The term is

indefinite because the specification does not clearly redefine the term. For purposes of

art rejections the examiner has interpreted the claimed "real-number" to simply mean a

non-imaginary integer value representing a part number.

Applicants have further claimed the term "interpreter-type" programming

language that is not clearly defined by the specification and is therefor also indefinite.

Here the examiner submits that, based on specification paragraphs [0214-0252],

applicants appear to simply be attempting to claim standard BASIC language

commands that would be available with any commercially available BASIC interpreter

such as GW-BASIC or Turbo BASIC. Clarification is respectfully requested.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.   Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,39,247 issued to Kirihara et al.

Regarding independent claim 1: Kirihara et al anticipates the limitations of independent claim 1 relating to a CAD system utilizing a network as presently claimed as follows:

- server computer connected to network and client computer performing data transmission with server via network; [server WS 1, Fig. 3]

sends CAD graphic data from server to client computer according to request from client computer; [client WS 2, Fig. 3],

- where server computer comprises:

storage means stores basic data for graphic data;

program data transmitting section reads basic data for graphic data from storage according to request from client computer, and sends data to client computer; [parts intrinsic information table 33 stored in memory, Fig. 3];

- client computer comprises:

program data receiving section for graphic data; [LAN 6, Fig. 3],

computing section that creates graphic data based on said data for graphic data;

CAD graphic data producing section that creates display data for graphic display unit in client computer based on graphic data created by computing section;

basic data for graphic data comprises variable programs for drawing different

graphics and real-number data substituted into variables of programs; [computing

section inherent in production of drawings 21 and 22, Fig. 3]

- storage means of server computer comprises variable program storage section

that stores variable programs, [parts shape management (graphics) table 36

stored in memory 2a, Fig. 3]; and

real-number data storage section storing real-number data; [Kirihara et al

teaches the use of parts code numbers as keys to be used in conjunction with a

distributed parts shape file 201 and a distributed parts construction file 301 to be

usedin the production of graphic data.]

-program data transmitting section reads specified variable program from variable

program storage section, and reads specified real-number data from real-number data

storage section according to request from said client computer, then sends that data to

said client computer; [graphic data producing section inherent in production of

drawings 21 and 22, Fig. 3].

- computing section of client computer substitutes specified real-number data into the

variables of specified variable program, executes program and creates graphic data.

[computing section inherent in production of drawings 21 and 22, Fig. 3]

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,39,247 issued to Kirihara et al in view of "BASIC for Beginners", Conley, Petorcelli Books Inc. 1982.

Regarding independent claim 2: Claim 2 merely includes the limitations of independent 1, anticipated as cited above, with the addition of limitations relating to "interpreter-type" programming language. Looking into applicants specification [0214-0252] for guidance on the specific meaning of "interpreter-type" programming language appears to reveal that this merely implies interpreter language command such as those available in the BASIC programming language. The examiner notes that the operators (commands) disclosed in paragraphs [0214-0252] of applicants' specification appear to be standard BASIC language commands that would be available with any commercially available BASIC interpreter such as GW-BASIC or Turbo BASIC. Accordingly, these limitations are rejected in view of the features of the BASIC programming language as disclosed by Conley on pages 10 and 52 and would have been knowingly implemented by a skilled artisan tasked with developing interpreted language commands from a programming language.

7.   Claims 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,39,247 issued to Kirihara et al in view of "BASIC for Beginners", Conley, Petorcelli Books Inc. 1982, and in further view of "GEOMNET: Geometric

Computing over the Internet," IEEE Internet Computing, Barequet et al, Vol. 3 No.

2, pp. 21-29 (March-April 1999).

Regarding dependent claims 3-8: Kirihara and Conley render obvious the

limitations of independent claims 1 and 2 as cited above.

However, Kirihara and Conley do not appear to teach the transmission of

variable programs from the server to the client, the variable programs for drawing

different graphics.

Analogous art Barequet et al teaches use of the "GeomNet" system a client-

server architecture "to provide easy Internet access to geometric implementations via a

plug-and-play environment." Page 21 paragraph 6. Specifically, the GeomNet system

includes Java wrappers directed to embedded applications, such as a CAD system or a

geometric database. The application expects the data to be preloaded into the

environment that the application works in. The environment supplies methods for

accessing and modifying the geometric data, so that the application usually needn't be

aware of the nature of the actual data structures that store these data. The output is the

contents of the environment upon termination of the application. [Barequet et al, page

24, column 2, paragraph 5] These embedded applications include variable programs for

drawing different graphics. Along with the benefits afforded via a "plug-and-play

environment," Barequet et al also cites the following benefits:

By providing a progressive migration of software from the host to the client, GeomNet

attempts to simplify interfacing, one of the most significant problems in software

engineering and in using software developed elsewhere. Users can invoke online,

separately or in a pipeline, a rich collection of geometric computations for performing

one-time or repeated tasks. The system is suitable for a wide variety of tasks, such as

invoking an algorithm with specific input data, checking geometric structures or data for

consistency, experimentally studying and/or comparing algorithms, designing new

algorithms through the integration of existing algorithms, or demonstrating the course of

an algorithm in an educational setting. The GeomNet system includes the display of

graphic names. See Fig. 5 and corresponding text. Kirihara et al teaches the use of

parts code numbers as keys to be used in conjunction with a distributed parts shape file

201 and a distributed parts construction file 301 to be used in the production of graphic

data.

It would have been obvious to one of ordinary skill in the art at the time of

Applicants' invention to modify the CAD network system of Kirihara and interpreter of

Conley, with the GeomNet system of transmission of embedded applications, because

the combination would permit the CAD clients to manipulate geometric objects via a

plug-and-play environment online.

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

U.S. Patent 6,397,117 issued to Burrows et al teaches automatic CAD dimensioning.

U.S. Patent 6,295,513 issued to Watanabe teaches automatic CAD dimensioning.

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Fred Ferris whose telephone number is 571-272-3778

and whose normal working hours are 8:30am to 5:00pm Monday to Friday. Any inquiry

of a general nature relating to the status of this application should be directed to the

group receptionist whose telephone number is 571-272-3700. If attempts to reach the

examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can

be reached at 571-272-2279. The Official Fax Number is: (571) 273 8300.

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